

1. (Once Amended - Clean Text) A surveying instrument comprising:

A¹ a sighting telescope optical system through which a sighting object can be sighted;

a distance measuring system which measures a distance to said sighting object, and outputs first data;

a phase detection autofocus system which detects a focus state of an image of said sighting object on a reference focal plane, and outputs second data;

a controller which determines reliability of the said first data and said second data; and

an AF driver which moves a focusing lens of said sighting telescope optical system to bring said sighting object into focus in accordance with one of said first data and said second data which has been determined to be reliable by said controller.

A² 3. (Once Amended - Clean Text) The surveying instrument according to claim 1, wherein said controller provides a consecutive autofocus mode in which said sighting object is brought into focus repeatedly via said AF driver, and a consecutive distance measurement mode in which said distance to said sighting object is repeatedly measured via said distance measuring system, and

wherein said consecutive autofocus mode starts at the same time as said consecutive distance measurement mode.

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4. (Once Amended - Clean Text) The surveying instrument according to claim 1, wherein said controller drives said AF driver to move said focusing lens to a predetermined position so that an object at a predetermined distance is in focus when said sighting object is unable to be brought into focus in a measurement mode in which a target is set at an arbitrary point.

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8. (Once Amended - Clean Text) A surveying instrument comprising:
a sighting telescope optical system through which a sighting object can be sighted;
a distance measuring system which measures a distance to said sighting object;
a phase detection autofocus system which detects a focus state of an image of said sighting object on a reference focal plane;
an AF driver which moves a focusing lens of said sighting telescope optical system to bring said sighting object into focus in accordance with an output of said phase detection autofocus system;
a selector for setting a consecutive distance measurement mode in which said distance measuring system performs plural measurements of distances to said sighting object; and

A3 a controller which coordinates focusing operations of said AF driver with distance measuring operations of said distance measuring system in the consecutive distance measurement mode.

A4 10. (Once Amended - Clean Text) The surveying instrument according to claim 8, wherein said selector comprises a start button, and the coordinated focusing operations of said AF driver and distance measuring operations of said distance measuring system in the consecutive distance measurement mode are initiated by a single-push operation of said start button.

11. (Once Amended - Clean Text) The surveying instrument according to claim 8, wherein said selector sets a consecutive autofocus mode in which said AF driver repeatedly brings said sighting object into focus, and wherein said consecutive autofocus mode starts at the same time as said consecutive distance measurement mode.

12. (Once Amended - Clean Text) The surveying instrument according to claim 8, wherein said controller drives said AF driver to move said focusing lens to a predetermined position so that an object at a predetermined distance is in focus when said